

Horsefield Tortoise Care Sheet

Common names: Horsefields Tortoise/Russian Tortoise/Central Asian Tortoise/Russian Steppe Tortoise/Four-Clawed Tortoise/Afghan Tortoise

Scientific name: *Testudo Horsfieldii*

Description

Description: The Horsefield's tortoise has a roundish shell (carapace) which is dark brown to olive green in colour. Horsefields differentiate from many other tortoises because they have four claws on their front feet.

Size: Horsefields are quite a small species of tortoise with males reaching only about 16cm (6.5inches) in length, while females are generally larger reaching up to 20cm (8 inches) in some instances.

Life span: With appropriate care Horsefield tortoises are very long lived. Reaching the age of 60 years or more is not uncommon, although many do not reach this milestone if essential care, enclosure conditions and dietary requirements are not strictly maintained.

Origin: Horsefield Tortoises are native to Central Asia including the Russian Steppes, Afghanistan, Uzbekistan, Pakistan, India, Iran, and some parts of China.

Tortoises can be considered a communal species, although many aspects need to be considered before doing so. Males and females are better kept separately except for breeding purposes. Males may also fight with other males for dominance if they are housed together. If you do house multiple Horsefield tortoises in the same enclosure you must be prepared to separate if any problems do arise. Horsefield tortoises should never be kept with any other species of tortoise except other Horsefield tortoises.

Housing

Tortoises require both an indoor and outdoor enclosure if they are to stay healthy and happy.

Indoor enclosures should be in the form of a tortoise table, which is well ventilated and as large as possible. Tortoises are an active species, so the more room you can allow them the better. Vivariums are not an ideal indoor enclosure for tortoises because they seem to have trouble recognising see-through barriers like glass, which can cause unnecessary stress for your Horsefield's tortoise.

Outdoor enclosures also need to be large and provide your tortoise with a variety of aspects including shade, shelter, edible plants and a sunny spot. The enclosure should be secure to prevent both your tortoise escaping (Horsefields are adept climbers and expert diggers) and potential predators (dogs, cats, foxes) from getting in. It is also important to ensure that your enclosure is not positioned in an area that allows your tortoise access to toxic or chemically treated plants. Tortoises do not always realise what vegetation is edible and not edible for them

and can become ill quite easily if they ingest unsuitable plants. Some toxic plants that are common in gardens include Foxgloves, Ivy, Daffodils, Hydrangeas, and Buttercups, but it is important to research ALL the plants that are reachable from the enclosure before placing your tortoise in the garden to ensure they are safe.

Your indoor enclosure should contain

Substrate

Horsefield Tortoises are a burrowing species, so appreciate a substrate that allows them to dig down. Pro Rep Tortoise Life is ideal and should be at least 10cm deep. Beech chips are another option, these still allow digging and are easy to keep clean.

Whatever substrate you decide to use it is important that it is kept dry and clean at all times. Horsefield tortoises are not tolerant to damp conditions and risk many illnesses if they are not kept in dry environments including respiratory and eye infections and shell or skin disorders.

A place for your Horsefield Tortoise to hide

Horsefield Tortoises will appreciate a place to hide within their enclosure. This can be in the form of plants, rocks and stones, branches, commercially produced hides or a large plant pot on its side. When designing the set up it is important to consider the potential hazards of the items you place within it. If a rock topples it can cause serious damage to your tortoise, so avoid stacking the stones at height. Also if your tortoise falls onto it's back it may struggle to right itself, which could be quite life threatening if this occurs under the heat source. Plants must also be non-toxic and safe to eat as a Horsefield Tortoise would potentially consume any vegetation available to it.

Water

Horsefield Tortoises, like all reptiles, need fresh, clean water daily. This can be provided using a large shallow water bowl or tray. It is important to change the water frequently because tortoises usually urinate at the same time as drinking. Changing the water daily (or more often if you observe your tortoise using the water bowl) will avoid the build up of bacteria and also prevent the tortoise from drinking it's own waste materials next time it is thirsty.

To ensure that your Horsefield Tortoise is drinking regularly, you can soak your tortoise in a shallow bath a few times weekly.

Heat & Light

There are a variety of different ways in which to provide sufficient heat and light within the enclosure, but it is important to note that regardless of the type of equipment setup you choose, Horsefield Tortoises require a overhead heat source with temperatures around 29-32°C (84-90°F), with surrounding temperatures around 20°C (68°F) and 12 hours of full spectrum UVA/UVB lighting. They are a diurnal species, so light is not required at night time, and temperatures can also be allowed to drop overnight to simulate the conditions they would be accustomed to in the wild.

The right sort of lighting is critical for the health and well-being of your Horsefield tortoise, as they require UV-B lighting to help their bodies absorb vitamin D3. When choosing appropriate equipment for your Horsefield tortoise enclosure, you must decide whether you are going to provide heat and UVB lighting in one unit or if you are going to run separate devices for creating the required heat and light. All equipment should be readily available from reptile specialist and online suppliers.

Basking lights are appreciated by Horsefield tortoises, who like to bask under a hot heat source during the daytime. A suitable heat emitting bulb can be placed over the enclosure and is quite safe as long as a guard is fitted to ensure your Horsefield Tortoise cannot come into contact with it. Some of these bulbs can provide both sufficient heat and light, so it is important to understand the capabilities of the bulb before using within the enclosure. Additional UVA/UVB lighting may not be required if the bulb you have chosen provides this full-spectrum light. The disadvantages of using these type of bulbs is that they have a relatively short life, so need to be replaced regularly (approximately every 6 months to a year dependant on type of bulb). Using a bulb also means that to provide heat there must always be light. Horsefield tortoises only require a 12 hour photoperiod per day, so it is beneficial to allow them some hours of darkness at night. Luckily Horsefield tortoises are quite tolerate to lower temperatures so a drop to normal room temperature overnight will not harm them.

Another option is to provide heat using a ceramic heat bulb that produces no light, but keeps the ambient air temperature high. This would require you to provide additional UVB lighting during the day to allow your Horsefield tortoise to gain the UVB that it needs to synthesise vitamin D3. Florescent lights are a good source of UVB lighting to use with a separate heat source like a ceramic, because they do not emit too much heat, so should not affect the temperature controls within the enclosure.

All heat sources need to be controlled by a suitable thermostat and be protected by a guard. Heat bulbs usually work well on Dimmer stats, whilst Ceramic heaters require a Pulse Proportional stat. Some thermostats can be purchased that will automatically lower the temperature at night time, but these are usually a little more expensive to buy. On/off timers can also be purchased to control the hours of heat and light, but this is a convenience device and not necessary for the safety of your Horsefield tortoise.

Natural sunlight is also beneficial to your Horsefield tortoise, so an outside enclosure used for grazing in the garden on summer days is essential. The enclosure should be placed in an area that is sunny, but shade should be provided also so that your Horsefield tortoise can hide away if it gets too hot. Some keepers do build a cold frame within the enclosure (wooden frame with clear plastic or toughened glass roof and entry hole on one side) which acts as a mini greenhouse. The temperature within this cold frame can be a few degrees higher than outside it, so it allows your Horsefield tortoise to find additional heat and shelter if it requires it.

General Care

Feeding

Ensuring that your Horsefield tortoise's diet is suitable and well-balanced enough to keep your tortoise in optimum health is the most crucial aspect of tortoise care. Horsefield tortoises have specific dietary needs and many problems can

arise from not meeting those needs, including too rapid or slow growth and shell deformities. They are an herbivorous species (plant eating) and need a high fibre, calcium-rich and low fat diet in order to stay healthy.

The majority of the Horsefield tortoise diet should be made up of non-toxic weeds and flowers, with the rest being leafy vegetables and the occasional complete pellets available from reptile specialists. Many of these food items can be collected from the wild, but it is important to ensure that they come from chemical/fertilizer-free sources. Alternatively, many online suppliers will sell packets of seeds suitable for growing your own tortoise food. These are especially useful in the winter months when suitable plants may not be as abundant outside, but will grow quite well in trays and window boxes within the house.

When buying vegetables from the supermarket for your tortoise it is recommended that they are organic and as fresh as possible. Frozen mixed vegetables can be offered to your Horsefield tortoise but these should be completely thawed before being offered.

Variety is key to both providing a well-balanced diet and keeping your tortoise interested in the food you are offering. A few edible plants and vegetables that are suitable for feeding to your Horsefield tortoise include dandelions (leaves and flowers), dry hay, grasses, bramble, chick weed, nasturtium, mustard, sunflower, mint, clover, water cress, turnip, carrot, cabbage, barley, apple, broad beans, rose petals and sow thistles. This is in no way a comprehensive list, so if you require further ideas on suitable food items then more research is recommended. Some items to avoid include iceberg lettuce, cucumber, tomato, spinach and banana, because these items are low in calcium and have poor nutritional value.

Calcium is a very important part of your Horsefield tortoise's diet and is essential for healthy shell development and the creation of vitamin D3, so it is advisable to dust your tortoise's food with a good calcium supplement daily. We use Nutrobal and Calci Dust. Cuttlefish is also a good source of calcium, so can be placed within your tortoise's enclosure for your tortoise to nibble on if required.

Cleaning

Your Horsefield tortoise's enclosure should be inspected and spot cleaned daily when changing the water.

Every two to three weeks clean out the table completely and sterilize the enclosure using a reptile friendly disinfectant. You will also need to remove and sterilise any décor, ready to replace back in the enclosure when it has been cleaned. Your tortoise should be moved to a temporary tank during the cleaning process.

Your outside enclosure may not need cleaning as such, but you may find that your tortoise can exhaust an area by eating any edible plants and digging up the soil. If the enclosure is movable, then it may be beneficial to the garden to move the enclosure regularly, ensuring before you do so that the new area is chemical/pesticide free, is escape proof and does not contain any toxic plants.

Handling

Unlike some larger species of tortoise, Horsefields do not grow too large or heavy to pick up and handle. This should always be done gently and confidently with care taken to support your tortoise completely so as to avoid dropping.

It is advisable to wash your hands both before and after handling your horsefields tortoise.

Hibernation

Horsefield tortoises should be hibernated over the winter months, unless they show any signs of illness and then they should be kept awake in an indoor enclosure. A vet check is advised before hibernating your tortoise.

A good time to hibernate your tortoise is in November when temperatures begin to drop naturally to below 10°C (50°F). Try to mimic this gradual drop in heat and light within the enclosure to prepare your tortoise for hibernation. Before allowing your tortoise to hibernate you should refrain from feeding for about 2-3 weeks to allow your tortoise time to clear any food still within the digestive system. Water should still be given.

Create a hibernation box in preparation. This is usually two cardboard boxes, one being smaller and being placed within the other. The larger box should be insulated with straw or shredded paper. Place your tortoise in the inner box with a bedding of more shredded paper and cover within the larger box. This hibernation box needs to be kept in a place where temperatures stay around 5°C (41°F), which should be constantly monitored using a thermometer. This is important because temperatures below freezing are likely to kill your tortoise and temperatures above around 10°C (50°F) would mean that your tortoise will remain active and risks losing sufficient weight or becoming ill by doing so. Check on your hibernating tortoise regularly to monitor for any signs of illness or awakening during this time.

In Spring your Horsefield tortoise should reawaken and should be removed from the hibernation box and returned to its indoor enclosure for a gradual increase in temperatures. It is advisable to soak your tortoise in a warm, shallow bath on the first day to encourage your tortoise to drink. Food can be offered at this time and should be taken within the first few days after re-awakening.

Sexing

Hatchling or juvenile Horsefield tortoises are difficult to sex, but as adults there are a few external signs that can be used for sex determination.

The easiest way to recognise a male is to examine the tail and the plastron (bottom shell). Males tend to have longer tails than females, so if your tortoise has a tail that is large enough to tuck up to one side, then this usually indicates a male. Female tails are quite stumpy in comparison, so recognition is quite straightforward.

Males also tend to have a curved plastron, while female plastrons are usually flattened. This is to help the male during breeding as he strives to mount the female.

Females are also generally larger than males, but this is not an accurate way of determining sex.